

### **REMARKS**

Claims 1 and 3-5 are pending and stand rejected. Applicants gratefully acknowledge the Examiner's withdrawal of prior rejections not specifically reiterated in this Action.

Claims 1 and 5 have been amended with this action. The amendments to claims 1 and 5 add no new matter. Support for these amendments to claims 1 and 5 can be found throughout the application, and is implicit to the teachings of the application as a whole as described further below. Applicants respectfully reserve the right to pursue subject matter removed by these amendments in continuing applications. Applicants aver that these amendments place the claims in condition for allowance for the reasons that follow.

#### **Double Patenting**

The Office Action states that claims 1 and 3-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 5,856,462 for the reasons of record. The Office Action further acknowledges Applicant's commitment to filing a Terminal Disclaimer to the cited patent should any of the currently pending claims be found allowable, and Applicants hereby continue to respectfully request that this rejection continue to be held in abeyance until such time.

#### **Rejection under 35 U.S.C. §102**

The Office Action states that claims 1 and 3-5 continue to stand rejected under 35 U.S.C. §102(b) as being anticipated by Cook (U.S. Patent Number 5,212,295). In particular, the Office Action states that Applicants' "appear to be arguing limitations that are not found in the claims" by their allegation "that Cook does not teach the claimed specific combination of racemic phosphorothioate-containing CpG linkage modified oligonucleotides of the invention"...(because)..."no racemic mixture is claimed" (by Applicants).

For the record, Applicants respectfully continue to rebut the basis for this rejection on the grounds that the Cook patent does not provide sufficient disclosure of any species that would anticipate Applicants' claimed invention. In particular, Applicants aver that the fortuitous disclosure of a single CpG-containing antisense oligonucleotide at column 13, lines 12-13,

coupled with general teachings by the Cook patent of “chirally pure phosphorothioate, methylphosphonate, phosphotriester or phosphoramidate oligonucleotides,” does not provide a sufficiently specific enabling description of Applicants’ invention to anticipate claim 1, much less the associated methods of use of claim 3-5 (see, *e.g.*, MPEP §2131.02). Indeed, the Cook patent’s teaching of stereoselective methods for preparing sequence-specific oligonucleotides having chiral phosphorous linkages provides no literal description of Applicants’ claimed methods of use of CpG-containing oligonucleotides, nor any hint of the problem caused by CpG oligonucleotides or the solution to this problem devised by the Applicants as instantly claimed.

Nevertheless, in order to facilitate prosecution and not in acquiescence to the rejection in view of Cook, Applicants have amended claims 1 and 5 to delete “stereospecific phosphorothioate CpG” from the list of CpG modifications covered by the claims, and, further, have amended claims 1 and 5 to specify that the remaining modifications are present as racemic mixtures of the modified CpG as alluded to by the Examiner. Applicants respectfully aver that these modifications obviate the Examiner’s basis for rejection in view of the Cook patent, and respectfully request entry of these amendments, which place the pending claims in condition for allowance.

Applicants note that these amendments are supported implicitly throughout the specification because the person of ordinary skill in the art would recognize that the failure to teach extraordinary stereospecific isomers of chiral alkylphosphonate, phosphotriester and phosphoramidate centers, along with the contrasting specific teaching of “stereospecific phosphorothioate” chiral centers, implicitly indicates that the indicated CpG modifications cover racemic mixtures of the chiral compounds.

Further, Applicants respectfully note that these amendments obviate the rejection under 35 U.S.C. §102(b) in view of the Cook patent, as addressed by the Examiner at page 5 of the Office Action, and thereby place the claims in condition for allowance. Accordingly, entry of these amendments and reconsideration and withdrawal of this rejection is respectfully requested.

Appln. No. 09/103,745  
Amdt. dated April 25, 2006  
Reply to Office Action of January 25, 2006  
Attorney Docket No.: 047508.642US2 (HYZ-642US2)

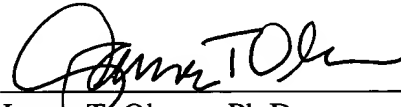
### CONCLUSION

In view of the foregoing remarks, Applicants respectfully submit that the pending claims are in good condition for allowance and prompt notification of such is respectfully requested. If a telephone interview would advance prosecution of the application, the Examiner is invited to call the undersigned at the number listed below.

This Action is being filed within three months of the mailing date of the last Office Action. Accordingly, no further fees are believed to be due in connection with the filing of this Amendment.

However, the Commissioner is authorized to debit Deposit Account No. 08-0219 for any required fee necessary to maintain the pendency of this application.

Respectfully submitted,



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James T. Olesen, Ph.D.  
Attorney for Applicants  
Reg. No. 46, 967

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Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, MA 02109  
617-526-6045 (telephone)  
617-526-5000 (facsimile)